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6,126,457); HARA (U.S. Patent No. 5,578,008); FAJT (U.S. Patent No. 4,439,801); and PUGH et al. (U.S. Patent No. 4,415,830). No agreement was reached.

Applicants would also like to express appreciation for the detailed Final Official Action provided and for the acknowledgment of Applicants' Claim for Priority and receipt of the certified copy of the priority document. Applicants also acknowledge the Examiner's acceptance of the drawing corrections. However, Applicants note that the Examiner has not indicated that the drawings have been approved by the Official Draftsperson on a Form PTO-948. The Examiner is thus requested to indicate that Applicant's drawings are acceptable in the next Official Action.

Upon entry of the above amendment, claim 1 will have been amended and claims 2-6 and 8-12 will have been canceled. Accordingly, claims 1 and 7 are currently pending and Applicants respectfully request reconsideration and withdrawal of the rejections, and an early indication of the allowance of claims 1 and 7. Such action is respectfully requested and is now believed to be appropriate and proper.

The Examiner has rejected claims 1, 2, and 4-12 under 35 U.S.C. § 103(a) as being unpatentable over ONIZUKA (U.S. Patent No. 5,877,944) in view of MURAKAMI (U.S. Patent No. 6,354,846) and SMITH et al. (U.S. Patent No. 6,126,457). The Examiner takes the position that ONIZUKA discloses an electrical connector housing as claimed, but fails to show bus bar tabs having notches configured to hold the fuses and relays, and the material

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of the bus bars. The Examiner contends that it would have been obvious to one having ordinary skill in the art to modify the busbars of ONIZUKA et al. to be formed of a copper alloy as taught by MURAKAMI and SMITH et al. as using a preferred material.

Although Applicants do not necessarily agree with the Examiner's rejection of claims 1, 2, and 4-12 on this ground, nevertheless, Applicants have amended independent claim 1 to clearly obviate the above noted ground of rejection in order to expedite prosecution of the present application. In this regard, Applicants note that ONIZUKA, MURAKAMI, and SMITH et al. fail to teach or suggest the subject matter claimed in independent claim 1, as amended. In particular, claim 1 has been amended to further recite the structure of the circuitry modules and to include the subject matter of claims 2-4, and claims 2-6 and 8-12 have been canceled. Claim 1, as amended, sets forth an electrical connector housing including, inter alia, a "connector circuitry module forming a top layer facing the first shell and containing connector-connecting circuits connected to the connector mounts", a fuse circuitry module and a relay circuitry module, "the fuse circuitry module and the relay circuitry module forming a layer provided below the connector circuitry module", "wherein said fuse circuitry module is formed integrally with said relay circuitry module, and said first busbars are formed unitarily and in one piece with said second busbars", "said resilient conductor that is harder than pure copper is a copper alloy or iron", and "said fuse circuitry module contains a plurality of first downwardly projecting strips, said relay circuitry module

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contains a plurality of second downwardly projecting strips, and said connector circuitry module contains a plurality of third downwardly projecting strips; said first, second, and third downwardly projecting strips connected by welding so that said fuse circuitry module, said relay circuitry module, and said connector circuitry module are electrically connected to each other". Support for the amendment to claim 1 is present at least in paragraphs [0027] - [0028] of the specification and in the drawings.

The ONIZUKA patent discloses a device including busbars 4 having busbar tabs 4a, but does not teach or suggest an electrical connector housing including first and second busbars having tabs formed of a conductor harder than pure copper, third busbars having tabs formed of pure copper, a connector circuitry module forming a top layer, a fuse circuitry module and a relay circuitry module forming a layer below the top layer; and the connector circuitry module, the fuse circuitry module, and the relay circuitry module having downwardly projecting strips welded together to electrically connect the modules. The MURAKAMI patent discloses a device including busbars formed of a copper alloy, but fails to teach or suggest the combination of busbars and busbar tabs of a resilient conductor harder than pure copper and busbars of pure copper, a connector circuitry module forming a top layer, a fuse circuitry module and a relay circuitry module forming a layer below the top layer; and the connector circuitry module, the fuse circuitry module, and the relay circuitry module having downwardly projecting strips welded together to electrically connect the

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modules, as recited in amended claim 1. Further, the SMITH et al. patent discloses busbars 66 of stamped metal, but fails to teach or suggest busbars formed of a resilient material harder than pure copper, a connector circuitry module forming a top layer, a fuse circuitry module and a relay circuitry module forming a layer below the top layer; and the connector circuitry module, the fuse circuitry module, and the relay circuitry module having downwardly projecting strips welded together to electrically connect the modules, as recited in claim 1, as amended. Therefore, both the MURAKAMI and SMITH et al. patents fail to cure the deficiencies of the ONIZUKA device, and even assuming, arguendo, that the teachings of ONIZUKA, MURAKAMI, and SMITH et al. have been properly combined, Applicants' claimed electrical connector housing would not have resulted from the combined teachings thereof.

Further, there is nothing in the cited prior art that would lead one of ordinary skill in the art to make the modification suggested by the Examiner in the rejection of claims 1 and 4-12 under 35 U.S.C. § 103(a) over ONIZUKA in view of MURAKAMI and SMITH et al. Thus, the only reason to combine the teachings of ONIZUKA, MURAKAMI, and SMITH et al. results from a review of Applicants' disclosure and the application of impermissible hindsight. Accordingly, the rejection of claims 1 and 7 under 35 U.S.C. § 103(a) over ONIZUKA in view of MURAKAMI and SMITH et al. is improper for all the above reasons and withdrawal thereof is respectfully requested.

The Examiner has further rejected claim 3 under 35 U.S.C. § 103(a) as being unpatentable over ONIZUKA in view of MURAKAMI and SMITH et al. as applied to claims 1, 2, and 4-12, and further in view of HARA (U.S. Patent No. 5,578,008), FAJT (U.S. Patent No. 4,439,801), and PUGH et al. (U.S. Patent No. 4,415,830). The Examiner takes the position that the ONIZUKA patent does not disclose the busbar material. The Examiner contends that it would have been obvious to make the conductor of the ONIZUKA device of iron as taught by HARA, FAJT, or PUGH et al. because copper and iron are interchangeable conductive elements. The Examiner further states that it is well known that iron is conductive and thus a person having ordinary skill in the art would know to use iron over copper for a stronger conductor.

Initially, Applicants note that the subject matter of claim 3 has been incorporated into claim 1, as amended, and claim 3 has been canceled. Further, Applicants note that ONIZUKA, MURAKAMI, and SMITH et al. fail to teach or suggest the subject matter claimed, including, inter alia, a “connector circuitry module forming a top layer facing the first shell and containing connector-connecting circuits connected to the connector mounts”, a fuse circuitry module and a relay circuitry module, “the fuse circuitry module and the relay circuitry module forming a layer provided below the connector circuitry module”, “wherein said fuse circuitry module is formed integrally with said relay circuitry module, and said first busbars are formed unitarily and in one piece with said second busbars”, “said resilient

conductor that is harder than pure copper is a copper alloy or iron”, and “said fuse circuitry module contains a plurality of first downwardly projecting strips, said relay circuitry module contains a plurality of second downwardly projecting strips, and said connector circuitry module contains a plurality of third downwardly projecting strips, said first, second, and third downwardly projecting strips connected by welding so that said fuse circuitry module, said relay circuitry module, and said connector circuitry module are electrically connected to each other”, as set forth in amended independent claim 1. Further, the HARA patent discloses a wire made of iron; the FAJT patent discloses a conductor made of copper coated iron; and the PUGH et al. patent discloses an electric lamp with wires made of iron. However, HARA, FAJT, and PUGH et al. fail to teach or suggest busbars formed of a resilient material harder than pure copper, a connector circuitry module forming a top layer, a fuse circuitry module and a relay circuitry module forming a layer below the top layer; and the connector circuitry module, the fuse circuitry module, and the relay circuitry module having downwardly projecting strips welded together to electrically connect the modules, as recited in claim 1, as amended. Therefore, the HARA, FAJT, and PUGH et al. patents fail to cure the deficiencies of ONIZUKA, MURAKAMI, and SMITH et al. Moreover, there is nothing in the cited prior art that would lead one of ordinary skill in the art to make the modification suggested by the Examiner in the rejection under 35 U.S.C. § 103(a) over ONIZUKA in view of MURAKAMI, SMITH et al., HARA, FAJT, and PUGH et al. Thus, the only reason to

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combine the teachings of ONIZUKA, MURAKAMI, SMITH et al., HARA, FAJT, and PUGH et al. results from a review of Applicants' disclosure and the application of impermissible hindsight. Even if the teachings of ONIZUKA, MURAKAMI, SMITH et al., HARA, FAJT, and PUGH et al. were combined, as suggested by the Examiner, the claimed combination would not result. Accordingly, a rejection of claim 1, as amended, under 35 U.S.C. § 103(a) over ONIZUKA in view of MURAKAMI, SMITH et al., HARA, FAJT, and PUGH et al. would be improper for all the above reasons.

Accordingly, Applicants respectfully request reconsideration and withdrawal of all the rejections, and an early indication of the allowance of claims 1 and 7.

SUMMARY AND CONCLUSION

In view of the foregoing, it is submitted that the proposed amendment is proper for entry since it merely combines dependent claims 2-4 with independent claim 1 and clarifies the language describing the structure of the circuitry modules, which, broadly, is an issue about which Applicants have already presented arguments and it is also submitted that none of the references of record, considered alone or in any proper combination thereof, anticipate or render obvious Applicant's invention as recited in claims 1 and 7. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

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Accordingly, consideration of the present amendment, reconsideration of the outstanding Final Official Action, and allowance of the present amendment and all of the claims therein are respectfully requested and now believed to be appropriate.

Applicants note that this amendment is being made to advance prosecution of the application to allowance, and should not be considered as surrendering equivalents of the territory between the claims prior to the present amendment and the amended claims.

Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so.

Should there be any questions, the Examiner is invited to contact the undersigned at the below listed number.

Respectfully submitted,
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MARKED UP COPY OF CLAIM AMENDMENTS

1. (Amended) An electrical connector housing comprising a first shell mountable on a second shell, the first shell provided with connector mounts to be fit with connectors, fuse mounts to be fit with fuses and relay mounts to be fit with relays, said electrical connector housing containing a busbar stack which includes a connector circuitry module forming a top layer facing the first shell and containing connector-connecting circuits connected to the connector mounts, a fuse circuitry module containing fuse-connecting circuits connected to the fuse mounts, and a relay circuitry module containing relay-connecting circuits connected to the relay mounts, the fuse circuitry module and the relay circuitry module forming a layer provided below the connector circuitry module;

said fuse-connecting circuits containing first busbars with first tabs, and said relay-connecting circuits containing second busbars with second tabs;

at least one of said first busbars and said second busbars being formed of a resilient conductor harder than pure copper;

said first tabs and said second tabs formed of a resilient conductor harder than pure copper so that said first tabs and said second tabs are directly connectable to said fuses and said relays, respectively; and

said connector-connecting circuits containing third busbars, said third busbars formed of pure copper;

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wherein said fuse circuitry module is formed integrally with said relay circuitry module, and said first busbars are formed unitarily and in one piece with said second busbars;
said resilient conductor that is harder than pure copper is a copper alloy or iron; and
said fuse circuitry module contains a plurality of first downwardly projecting strips,
said relay circuitry module contains a plurality of second downwardly projecting strips, and
said connector circuitry module contains a plurality of third downwardly projecting strips,
said first, second, and third downwardly projecting strips connected by welding so that said
fuse circuitry module, said relay circuitry module, and said connector circuitry module are
electrically connected to each other.